

WHAT IS CLAIMED IS:

1. A cutting tool comprising:

a cemented carbide body comprising WC with an average grain size of about $1.4\ \mu\text{m}$, 12-13 wt-% Co, 0.4-1.8 wt-% TaC+NbC, and a low W-alloyed binder phase with a CW-ratio of 0.82-0.91; and

a coating comprising:

- a first innermost $0.1\text{-}0.5\ \mu\text{m}$ thick layer of TiN;

- a second layer comprising a multilayered structure of $0.05\text{-}0.2\ \mu\text{m}$ thick sublayers of a composition $(\text{Ti}_x\text{Al}_{1-x})\text{N}$ in which x varies repeatedly between the two ranges

$0.45 < x < 0.55$ and $0.70 < x < 0.80$, a first sublayer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$ adjacent to the TiN

bonding layer having an x-value of $0.45 < x < 0.55$, a second sublayer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$

having an x-value of $0.70 < x < 0.80$ and a third sublayer having x of $0.45 < x < 0.55$, the sequence of sublayers alternating and repeating until 12-25 sublayers are built up;

- a third $0.1\text{-}0.5\ \mu\text{m}$ thick layer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$, where x is $0.45 < x < 0.55$; and

- a fourth outermost $0.1\text{-}0.2\ \mu\text{m}$ layer of TiN;

wherein the total coating thickness is $1\text{-}8\ \mu\text{m}$ and the thickness of the second layer constitutes 75-95% of the total coating thickness.

2. The cutting tool according to claim 1 wherein the cemented carbide body has a

composition comprising 12.3-12.9 wt-% Co and 0.5-1.7 wt% TaC+NbC.

3. The cutting tool according to claim 1 wherein the cemented carbide body is free from graphite.

4. A method of making a cutting tool, the cutting tool comprising a WC-Co based cemented carbide body comprising WC with an average grain size of about $1.4\ \mu\text{m}$, 12-13 wt-% Co and 0.4-1.8 wt-% TaC+NbC, and a low W-alloyed binder phase with a CW-ratio of 0.82-0.91, the method comprising:

5 - applying by PVD a first innermost $0.1\text{-}0.5\ \mu\text{m}$ bonding layer of TiN to the body;
 - applying by PVD a second layer comprising a multilayered structure comprising a plurality of $0.05\text{-}0.2\ \mu\text{m}$ thick sublayers of a composition $(\text{Ti}_x\text{Al}_{1-x})\text{N}$ in which x varies repeatedly between the two ranges $0.45 < x < 0.55$ and $0.70 < x < 0.80$, a first sublayer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$ adjacent to the TiN bonding layer having an x-value of $0.45 < x < 0.55$, a second sublayer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$ having an x-value of $0.70 < x < 0.80$ and a third sublayer having x in the range $0.45 < x < 0.55$, the sequence of sublayers alternating and repeating until 12-25 sublayers are built up;

 - applying by PVD a third $0.1\text{-}0.5\ \mu\text{m}$ thick layer of $(\text{Ti}_x\text{Al}_{1-x})\text{N}$, where x is $0.45 < x < 0.55$; and

15 - applying by PVD a fourth outermost $0.1\text{-}0.2\ \mu\text{m}$ layer of TiN;
 wherein the total coating thickness close to a cutting edge of the tool is in the range of $1\text{-}8\ \mu\text{m}$ and the thickness of the second layer constitutes 75-95% of the total coating thickness,

20 5. The method according to claim 4 wherein the cemented carbide body comprises a WC-Co composition of WC with an average grain size of about $1.4\ \mu\text{m}$, 12-13 wt-% Co and 0.4-1.8 wt-% TaC+NbC, and a low W-alloyed binder phase with a CW-ratio of 0.82-0.91.

 6. The method according to claim 4 wherein the wear resistant coating is deposited by CVD techniques.